

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

REPORT

STAT

DATE DISTR. 25 May 1948

NO. OF PAGES 4

NO. OF ENCLS.
(LISTED BELOW)

SUPPLEMENT TO
REPORT NO.

STAT

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT 50 U.S.C. 31 AND 32. AS AN OFFENSE, ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS TO ANY PERSON OR AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED. NO OTHER INFORMATION CONTAINED IN BODY OF THE FORM MAY BE UTILIZED AS DEEMED NECESSARY BY THE RECEIVING AGENCY.

SOURCE Documentary as indicated. (Information specifically requested.)

RECENTLY PUBLISHED SOVIET RESEARCH ON PEST CONTROL

"Destruction of Infectious Nematode Larvae by Means of Soil Fungi (Review)," F. F. Soprunov, Turkmen Inst of Malaria and Medicinal Parasitology, 5 pp

"Med Parazitol i Parazitar Bolezni" Vol 16, No 2, 1977

Discusses different types of fungi and conditions of propagation, mechanics of destroying nematodes with fungi, experience with the use of fungi in combating nematodes in human beings and in domestic animals. Director of the Institute is given as S. A. Pramiikov. (16728)

"Use of a New Soviet Insecticide - Pentachlorin Paste,"
V. Okulov

"Med Parazitol i Parazitarnye Bolezni" Vol 16, No 1, 1947,
pp 33-5

Pentachlorin paste would seem to be 40% BDT used as a 10% aqueous emulsion in quantities equivalent to 10 ml/sq m.

"DDT Preparation - Pentachlorin," M. Kh. Bergol'ts,
Acad Med Sci, Moscow

"Med Parazitol i Parazitar Bolezni" Vol 16, No 1, 1947,
pp 84-8

- 1 -

CLASSIFICATION RESTRICTED

STATE	☒ NAVY	☒ NSRB	DISTRIBUTION					
ARMY	☒ IJR	☒						

RESTRICTED

RESTRICTED

RESTRICTED

STAT

Brief review of DDT and preparations made therefrom.
Brief mention of hexachlorocyclohexane.

"Thiodiphenylamine in the Control of Anopheles larvae,"
V. F. Viktorov, Yu. S. Zhenshurist

"Med Parazit i Parazitarnye Bolezni" Vol 16, No 1, 1947,
p 46

Thiodiphenylamine alone in a concentration of 1 kg/hectare was ineffective but a suspension of the same amount with 500 g of soap in about 300:1 of water was 100% effective.

"Meditsinskaya Parazitologiya i Parazitarnye Bolezni"
Vol 16, No 1, 1947

The following articles on DDT appear in this issue:

"Perspectives of DDT Application Against Arthropoda,"
V. N. Beklemishev, Acad Med Sci, Moscow, pp 3-9

"DDT in Mosquito Control," V. A. Nabokov, A. V. NikiForova, Acad Med Sci, Moscow, pp 10-16

"Use of DDT Against Flies," V. P. Derbeneva-Ukhova,
Acad Med Sci, Moscow, pp 16-28

"Use of DDT against Bedbugs," V. A. Nabokov, S. S. Potikha, Acad Med Sci, Moscow, pp 28-30

"Use of DDT against the Tick, Alektorobius Verrucosus 1934," M. V. Pospelova-Shtram, Acad Med Sci, Moscow, pp 30-33

"Toxicity of Dichlorodiphenyltrichloroethane -DDT,"
V. I. Vashkov, N. A. Sazonova, pp 36-38

"Test for Toxicity of DDT Using Bandages Impregnated with Solutions and Emulsions," V. I. Vashkov, pp 38-40

"Mechanism and Action of DDT against Insects," L. V. Yaguzhinskaya, Acad Med Sci, Moscow, pp 88-90

"Provisional Instructions on the Use of DDT against Flies," V. Ukhova, Acad Med Sci, Moscow, pp 91

"Provisional Instructions on Use of DDT against Mosquitoes," V. P. Ukhova, V. A. Nabokov, Acad Med Sci, Moscow, pp 91-3

"Evaluation of Insecticidal Properties of 'Insektol' in Respect to Mosquitoes," S. S. Kucher

"Vrachebnoye Delo" Vol 26, 1946, p 246

"Insektol," a mixture of aromatic hydrocarbons and naphtholsulfonic acids, gave 98.9-100% kill of mosquitoes when used in a closed room and when about 30 cc of 15% aqueous solution was used per

- 2 -

RESTRICTED

RESTRICTED

RESTRICTED

STAT

square meter of space. The odor remains for 5-6 days but does not have mosquito-repelling properties.

"Results of Use of Thiodiphenylamine as a Larvicide," Vaynberg and Krasil'shchikov

"Med Parazitol i Parazitar Bolezni" Vol 15, No 6, 1946, pp 75-77

Thiodiphenylamine (phenothiazine) was used in concentrations varying from 0.5 to 1 kg/hectare as a larvicide against mosquitoes.

"Hexachloroethane as Insecticide against Larvae of Flies," A. M. Klechetova

"Med Parazitol i Parazitar Bolezni" Vol 15, No 6, 1946, pp 77-81

Hexachloroethane would seem to be effective in concentrations of 200 g/kg of substrate (manure of soil).

"Use of Chloride of Lime for Control of Flies," T. Yu. Dulinskaya, A. M. Klechetova, A. N. Tregubov

"Med Parazitol i Parazitar Bolezni" Vol 15, No 6, 1946, pp 81-82

A 20-25% solution is recommended. Dosage is one kg/m² of substrate.

"Mechanism of Insecticidal Action and the Permeability of the Cuticle of Insects," M. I. Dulinskaya, Moscow Botanical Gardens

"Compt Rend Acad Sci URSS" Vol 51, 1946, pp 557-9

Rate of penetration of insect cuticle by various insecticidal materials is directly correlated with their toxicities to aphids. The organic thiocyanates (lethane) and anabazine as free bases penetrated the cuticle readily, but the alkaloid sulfate penetrated more slowly. Coefficients of penetration were determined from the rates of passage of the materials through untreated and alkali-treated larval skins of the fly, *Chironomus plumosus*.

"Paris Green Suspension for Controlling Anopheles," N. A. Shugar

USSR Patent 64,533, issued 30 Apr 1945

Paris green is suspended in tar water, instead of kerosene or naphtha.

- 3 -

RESTRICTED

RESTRICTED

RESTRICTED

RESULTS

STAT

"Work of the All-Union Scientific Pharmaceutical-Chemical Institute (VNIKhPI) in 1944" A. G. Baychikov

"Farmatsiya" Vol 8, No 3, 1945, pp 19-21.

Research was conducted on insecticides, especially for louse control; synthetic antipsychotics; synthetic estrogens for medical and veterinary use; cocaine substitutes and other Soviet plant alkaloids; sulfonamides, their structure and mechanism of action; sulfonamides and para-aminobenzoic acid as antidotes in poisoning with PhNO_2 or its derivatives; clinical aspects of some blood diseases; antibiotics; antimalarials; and new drugs, natural or synthetic. Attention was also given to analytical methods and to quality standards.

"Phenothiazine as a Substitute for Existing Larvicides in Combating Mosquito Larvae," D. I. Dobrosmylov

"Med Parazit i Parazitar Bolezni" Vol 14, No 2, 1945, pp 57-62

Phenothiazine is effective when sprinkled on water surfaces at 1 kg/hectare, provided it is ground to at least 200 mesh. In a aqueous soap suspension at 2-5 kg it is equally larvicidal.

"Pyridine Bases as Substances in Louse Control," M. I. Komarova, Sverdlovsk Microbiol Inst

"Med Parazit i Parazitar Bolezni" Vol 14, No 2, 1945, p 7.

Crude petroleum pyridine-base mixtures are effective in 30-40% concentrations in contact with the infected area for at least 0.5 hour; eggs are also killed. Exposure of clothes to pyridine-base vapor in a closed container for 2 hours at room temperature is sufficient to kill the pests.

"Insecticide SK," A. P. Belikova

"Farmakol i Toksikol" Vol 8, No 1, 1945, p 53

"Insecticide SK (I), a chlorination product of pine turpentine, is a thick paste, insoluble in water, slightly soluble in alcohol, readily soluble in ether and light oils. It is used in 50% ointments or soap blends to combat lice. Skin patch tests on 50 mice and 30 rabbits, using muslin squares soaked in 1% aqueous emulsion or alcohol solution of I and dried, showed no toxicity after 5 days (mice) or 10 days (rabbits). Undergarments, dipped in 0.5% emulsions of I in aqueous soap solution, were worn 10 days by 3 persons. Neither skin nor general condition showed any toxicity. There was no change in blood or urine. Hence I has no toxic action in normal use, either by direct contact or by resorption.

- END -

- 4 -

RESTRICTED

RESTRICTED